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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,633	02/10/2004	Hiroaki Maehara	118611	9481
25944	7590	12/09/2005		
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			EXAMINER LAI, ANNE VIET NG	
			ART UNIT	PAPER NUMBER
			2636	

DATE MAILED: 12/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/774,633	Applicant(s) MAEHARA, HIROAKI	
	Examiner Anne V. Lai	Art Unit 2636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/10/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of claims 1-20 and 24 in the reply filed on 4 October 2005 is acknowledged. The traversal is on the ground(s) that the search and examination of the entire application could be made without serious burden. This is not found persuasive because the search and examination of the entire application is a serious burden.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 17-20 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ries-Mueller [US. 6,856,044] in view of Matsubara [US. 5,155,467].

In claims 1 and 24, Ries-Mueller discloses an anti-theft apparatus comprising an acceleration sensor mounted on a vehicle for detecting acceleration of the vehicle in normal operating mode and in antitheft mode (abstract; col. 1, line 47- col. 2, line 4; claims 1-7). Ries-Mueller does not specify the sensitivity switch; Matsuhara teaches setting the acceleration sensor for sensing theft of automobile at higher sensitivity than in normal vehicle operation for qualification of resolution (col. 1, line 61-col. 2, line 10).

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to switch the sensor of Ries-Mueller to different sensitivity in normal operation and in antitheft operation for qualification resolution of theft.

In claims 2 and 5, Ries-Mueller combined discloses plural acceleration sensors (inclination, acceleration and yaw-rate sensors; col. 4, line 38-50).

In claim 3, Ries-Mueller combined discloses a theft status is confirmed when any one of the acceleration sensors detects acceleration exceeds a threshold value (col. 4, line 38-50).

In claim 4, Ries-Mueller combined discloses a theft status is confirmed when any of the acceleration sensors detects acceleration in the same direction exceeds a threshold value (col. 2, line 58-col. 3, line 3).

In claim 17-18, Ries-Mueller discloses a vehicle state-monitoring unit for monitoring state of the vehicle including monitoring an on/off state of an ignition key and sensing out antitheft instruction accordingly (operating-state detection 28; col. 3, lines 7-31).

In claim 19, Ries-Mueller and Matsubara combined discloses an antitheft method using the apparatus of claim 1.

In claim 20, Ries-Mueller combined discloses a microcontroller to control the operation of the antitheft apparatus (14, figs. 1-2) therefore computer-executed program is inherent.

4. Claims 6-11 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ries-Mueller and Matsubara in view of Hasegawa [US. 2002/0039951].

In claim 6, Ries-Mueller and Matsubara combined omits vibration sensing; Hasegawa teaches vibration and inclination sensors are elements of acceleration sensor of an antitheft apparatus (64, fig. 2; abstract). It would have been obvious combined plural sensors types increases the accuracy of the sensing device.

In claim 7, although positions of the sensors are not specified by Ries-Mueller combined, it would have been obvious, the sensors for side air bags must be at the side of the vehicle, or the sensors for doors tampering must be at outer edge part of the vehicle.

In claim 8, although the different in sensitivity of the sensors are not disclosed, however when the vehicle is being jacked in one side (e.g., tire theft), it would have been obvious the travel distance of the outer part at that side is longer than the travel distance of the center part of the vehicle therefore the sensitivity of the sensor at the central must be set higher than the one at outer part to provide accuracy to the sensing operation.

In claim 9, Ries-Mueller discloses using existing acceleration sensors and yaw sensors of normal vehicle operation for detecting theft in antitheft mode of operation (col. 4, line 38-50). It is inherent the yaw rate sensing data is used to control the suspension and stability of the vehicle; and it would have been obvious at the time being most vehicles are equipped with front and side airbags, therefore some the

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acceleration sensors in Ries-Muller must be sensors for air bag deployment at vehicle normal operation mode.

In claim 10-11, Hasegawa teaches a filter circuit for eliminating noise from the detection result of the acceleration detection unit (40 in fig. 2; [0099]); although switching the cutoff frequency to a frequency correspondent to theft judgment is not disclosed, it would have been obvious to one of ordinary skill in the art at the time the invention was made, when the sensibility of the acceleration detection unit is being changed, the level of tolerable noise should also be changed to adapt to the sensibility of the acceleration unit.

In claim 14, Hasegawa teaches a battery supplying power to an ECU containing the acceleration detection unit; and the acceleration detection unit includes a power control unit for controlling the power supply only to the acceleration detection unit for detecting the theft state (figs. 12a-12b; [0104]-[0110]).

In claim 15, Matsubara teaches intermittent supply power to the sensor to reduce power dissipation (S3, figs. 10-12; col. 6, line 66- col. 7, line 53).

5. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ries-Mueller combined above in view of Script [US. 6,940,405] and further in view of Lin [US. 5,579,230] or Foo [US. 6,186,539].

In claims 12-13, Ries-Mueller combined fails to disclose noise elimination by integration of acceleration value. Script teaches an antitheft device wherein additional noise resistance can be obtained by performing double integration on output signal of the acceleration sensor (col. 25, lines 46-61). Lin and Foo teach noise elimination for

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vehicle acceleration detection circuit by using filter and integrator (22, 48, 62, 36; fig. 2; col. 3, lines 29-36 in Lin; and figs. 1, 3; col. 22, lines 22-39 in Foo). It would have been obvious to one of ordinary skill in the art at the time the invention was made; periodic integration circuit can be added to the apparatus of Ries-Mueller combined to provide additional noise resistance to the acceleration sensor.

6. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ries-Mueller, Matsubara and Hasegawa in view of Okada [US. 6,816,081].

In claim 16, Ries-Mueller combined does not specifically disclose stop supply power when battery is low in voltage; Okada teaches using a switch halting supply power to a detector when battery is low in voltage to minimizing drainage of the battery (fig. 19; col. 15, lines 12-45); It would have been obvious stop supplying power when the battery is low in voltage avoid battery drainage, therefore saving a battery life.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne V. Lai whose telephone number is 571-272-2974. The examiner can normally be reached on 9:00 am to 6:30 pm, Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hofsass Jeffery can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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12/5/05



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